



## Frequently Asked Questions about Lead Testing of Drinking Water in California Schools

*DISCLAIMER: This document is intended to provide answers to questions that may arise regarding lead testing of drinking water in California schools. Nothing in this document supersedes any statutory or regulatory requirements or permit provisions for public water systems.*

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## **Purpose and Requirements of Permit Amendment Requiring Public Water Systems to Assist Schools in Lead Testing of Drinking Water**

### **1. What are the new requirements for lead testing of drinking water in California schools? Why was this action taken?**

As a result of a permit action by the State Water Resources Control Board Division of Drinking Water (DDW) on January 17, 2017, all community water systems are required to collect and analyze up to five water samples from drinking water fountains and regularly used drinking water faucets at a school, if the testing is requested by a superintendent or designee of a school, governing board or designee of a charter school, or administrator or designee of a private school.

Recent events in cities across the United States have shown that lead in drinking water remains an ongoing public health challenge and an important concern for children's health. DDW is taking action to allow schools (Kindergarten through 12<sup>th</sup> grade) to perform lead testing on water from regularly used drinking water faucets used for drinking or cooking, and requiring community water systems to assist schools in this effort.

### **2. Are schools required to test their drinking water for lead?**

There are approximately 500 schools in California that are permitted as a public water system because they have their own water supply, such as a well. Those schools are already required to test their taps for lead (and copper), and have been performing this testing for many years. The DDW permit action does *not* apply to schools that are already regulated as public water systems.

However, most schools in California are served by community water systems which have not been required to test their water for lead under the current Lead and Copper Rule.

### **3. Why did our water system receive a permit amendment requiring lead testing of drinking water in schools when there are no schools in our distribution system?**

DDW issued the permit action requiring lead testing of drinking water in California schools to all community water systems in California. If your water system does not serve potable water to at least one K-12 school listed in the [California School Directory](#), the permit amendment does not apply to your water system and no further action is necessary.

**4. Our water system is regulated by a Local Primacy Agency (LPA), not DDW. How do the lead testing requirements apply to our system?**

The permit provisions and testing requirements apply to all community water systems that serve water to a school, regardless of water system size. The LPA should be consulted as needed and required by the permit amendment. Sampling results should be reported to the DDW database.

## **Requests for Lead Sampling in Schools**

**5. I am a school administrator. How can I have the drinking water at my school tested for lead?**

The superintendent or designee of a school, governing board or designee of a charter school, or administrator or designee of a private school must submit a written request to the public water system that serves water to the school. DDW has created [a template to request sampling](#). The designee is any authorized school personnel designated in writing by the superintendent, charter school governing board, or private school administrator, such as an environmental health manager or principal. The superintendent, charter school governing board, or private school administrator must provide written authorization to the water system for a designee to request lead testing. Water systems are not required to proceed with lead sampling at a school if a written request has not been made by authorized personnel.

You can visit [the DDW website](#) to determine which community water system serves your school. You can also [contact your local DDW office](#) and we can assist you in determining which community water system serves your school.

**6. When can lead testing be requested?**

The superintendent or designee of a school, governing board or designee of a charter school, or administrator or designee of a private school can submit a written request for lead testing to their community water system any time before November 1, 2019.

**7. Which schools can request lead testing of their drinking water?**

The DDW permit action requires community water systems to assist any school in their service area that is listed in the [California School Directory](#). This directory includes schools for grades K-12, including private, charter, magnet and non-public schools. The directory does *not* include preschools, daycare centers, or postsecondary schools.

## Collecting Samples in Schools

### 8. How will the lead testing be performed?

A water system representative will make an appointment to come to the school, develop a sampling plan, and collect up to five water samples. Samples may be collected from regularly used drinking fountains, cafeteria/food preparation areas, or reusable water bottle filling stations. Samples may be taken at sites where drinking water receives additional treatment, such as water softening. Sampling sites should be selected according to the [sampling guidance prepared by DDW](#).

The samples will be sent to a laboratory for analysis. Laboratories used for sample analysis must be certified for lead testing of drinking water by the state [Environmental Laboratory Accreditation Program \(ELAP\)](#).

### 9. When will the sampling be conducted?

Within 90 days of receiving the sampling request, the water system must meet with school officials, finalize a sampling plan, and collect water samples, or develop an alternate schedule that is approved by DDW.

The samples will be collected while school is in session in order to get the most representative results. Samples will be collected by a water system representative who is adequately trained to collect lead samples. The water system will receive the results of the sample analyses from the laboratory and meet with school officials to discuss the sampling results.

### 10. What size sample bottle should be used? How should the sample be preserved? Should aerators be removed? Can samples be invalidated?

DDW has prepared a [sampling protocol](#) for lead testing of drinking water in California schools, which includes information on sample bottle size, preservation and chain of custody requirements, reporting requirements, and sample invalidation procedures. It should be noted that the DDW sampling protocol has different requirements than the USEPA's [3Ts \(Training, Testing and Telling\) Program for Schools](#), including sample size and lead action level. Water systems should adhere to the DDW sampling protocol when conducting lead sampling in California schools.

### 11. Who pays for lead testing of drinking water in California schools?

The community water system that serves the school is responsible for all costs associated with collecting, analyzing, and reporting drinking water samples for lead testing at up to five locations at each school, and is required to meet with the authorized school representative to develop a sampling plan and review the sampling results. The community water system will *not* pay for any maintenance or corrections needed at the school if elevated lead levels are found in the drinking

water, but is required to conduct repeat sampling at the school to confirm elevated lead levels and the effectiveness of any corrective action taken by the school.

**12. Can a school take drinking water samples at more than five locations?**

The DDW permit action requires that water systems assist schools in sampling up to five locations at each school. If the school district wishes to sample additional locations, the water system is not required to assist in the collection or analysis of those samples. Only five samples per school will be reported to the DDW database.

## **Reporting Results**

**13. Who will get the results of lead testing of drinking water performed at California schools?**

The lab results from the sampling are reported directly to the community water system. The water system will then provide the results to the school and meet with the school staff to assist with interpretation of the sample results.

Water systems are required to include a summary of the number of schools requesting lead sampling in their annual Consumer Confidence Report (CCR).

**14. When taking the school samples, my water system would like to take a distribution system sample at the same time. How do I report this sample result?**

A distribution system sample, such as from a routine Total Coliform Rule (TCR) monitoring location near the school, may be taken at the same time as the school sampling is performed to determine water quality before it enters the school's plumbing. This is a routine practice at some water systems; however, these distribution samples are not required by the DDW permit action and should not be reported to the DDW database, because the database is only designed to accept sample results from school tap locations.

## **Interpreting and Responding to Sample Results**

**15. What is the action level for lead in drinking water at schools?**

The DDW sampling protocol and permit action have established 15 parts per billion (ppb) as the action level for lead sampling in schools. This is the same concentration as the action level for residential tap sampling conducted by water systems for the Lead and Copper Rule. One part per billion is equivalent to about one drop in an Olympic-sized swimming pool.

The USEPA's [\*3Ts \(Training, Testing and Telling\) Program for Schools\*](#) currently uses 20 ppb in a 250 milliliter (mL) sample as the trigger level for follow-up testing; however, the California lead sampling of drinking water in schools sampling protocol was developed to align more closely with the tap sampling already performed by community water systems under the Lead and Copper Rule.

**16. The Lead and Copper Rule uses a 90<sup>th</sup> percentile value to determine compliance with the action level. Does that apply to the lead sampling in schools program?**

Each sample location at a school is compared individually to the 15 ppb action level. There is no 90<sup>th</sup> percentile calculation.

**17. What happens if lead is detected in the drinking water at a school?**

The USEPA's [\*3Ts \(Training, Testing and Telling\) Program for Schools\*](#) and the American Water Works Association's [\*Assisting Schools and Child Care Facilities in Addressing Lead in Drinking Water\*](#) contain detailed information on routine, interim, and long-term remedies if lead is detected in drinking water at a school.

In addition, the community water system will notify school officials within two school business days of receiving any sample results that exceed the lead action level of 15 parts per billion (ppb), and will then meet with the school staff to assist with interpretation of the sample results and provide information regarding potential corrective actions. The water system will conduct repeat sampling at any locations that exceed 15 ppb and obtain the results from the laboratory within 10 business day, as well as after any corrective action is taken. Repeat sampling will not be conducted at a sample site if the school chooses to remove the tap from service.

The community water system that serves the school is responsible for all costs associated with collecting, analyzing, and reporting drinking water samples for lead testing at California schools required by the January 17, 2017 permit action and the water system is also required to meet with the authorized school representative to develop a sampling plan and review the sampling results. The community water system will *not* pay for any maintenance or corrections needed at the school.

To assist schools in providing access to, and the quality of, drinking water in public schools pursuant to Senate Bill 828 (2016), the State Water Board is establishing a new grant program. Approximately \$9.5 million will be available later in 2017 for schools to install water bottle filling stations, install or replace drinking water fountains, and for the installation of treatment devices at these locations that are capable of removing contaminants from drinking water.



It should be noted that DDW has no regulatory authority over schools served by public water systems and cannot require any specific action be taken by the school or school district in the event of a lead action level exceedance at a school.

**18.If elevated lead levels are found in a school's drinking water, will other drinking water tap locations be sampled for lead?**

If elevated lead levels are found in a school, the school district may choose to sample additional drinking water tap locations; however, the community water system that serves the school is not required to conduct sampling at any locations other than the five locations chosen for initial sampling.

**19.If elevated lead levels are found in a school's drinking water, will the community water system that serves the school receive a citation or fines?**

Community water system compliance with the Lead and Copper Rule will continue to be determined by the results of residential sampling done according to the water system's Lead and Copper Rule tap sampling plan. Elevated lead levels found during a special sampling event at a school will not cause a water system to be out of compliance with the Lead and Copper Rule.

## **Information about Lead Sources and Health Effects**

**20.What are other environmental sources of lead exposure for children?**

According to the USEPA's 3Ts (Training, Testing and Telling) Program for Schools, the most common source of lead exposure for children is chips and particles of deteriorated lead paint, especially if they are exposed to house dust or soil contaminated by leaded paint. Other potential sources include lead in the air from industrial emissions, lead deposits in soils near streets from past emissions by automobiles using leaded gas, and lead in consumer products and food, such as imported candies, medicines, dishes, toys, jewelry, and plastics.

**21.Where does lead in drinking water come from?**

According to the USEPA's [3Ts \(Training, Testing and Telling\) Program for Schools](#): "Most lead gets into drinking water after the water leaves the local well or treatment plant and comes into contact with plumbing materials containing lead. These include lead pipe and lead solder (commonly used until 1986), as well as faucets, valves, and other components made of brass. The physical/chemical interaction that occurs between the water and plumbing is referred to as corrosion. The extent to which corrosion occurs contributes to the amount of lead that can be released into the drinking water."



## **22. What are the health risks of lead in drinking water?**

Lead can affect almost every organ and system in your body. The most sensitive is the central nervous system (brain), particularly in children. Lead also damages kidneys and the reproductive system. The effects are the same whether it is breathed or swallowed. Lead in children's blood has been associated with reduced IQ and attention span, learning disabilities, poor classroom performance, hyperactivity, behavioral problems, impaired growth, and hearing loss.

Infants and children who drink water containing lead in excess of the lead action level may experience delays in their physical or mental development. Children may show slight deficits in attention span and learning abilities. Adults who drink this water over many years may develop kidney problems or high blood pressure.

## **Information about Lead Testing of Drinking Water in Other Locations**

### **23. How can I find out what my community water system's Lead and Copper Rule sampling results are?**

Lead and copper sampling results, as well as other water quality data, are reported in your community water system's annual Consumer Confidence Report (CCR), which is sent or emailed to customers around July 1 of every year. You can obtain a copy of the most recent CCR by [contacting your community water system](#) by phone or checking their website. You can also search the [USEPA website for the CCR](#).

### **24. How can I have the drinking water at my home tested for lead?**

USEPA has [recommendations for testing drinking water in the home](#). You can also find information on lead sampling in drinking water for individual homeowners and homes on a private well on the [State Water Board website](#). State-certified, commercial labs that can analyze drinking water for lead and other inorganics can be found by searching the [Geographic Information System map on the ELAP website](#). Customers can also [contact their community water system](#) and volunteer to participate in the residential tap sampling program for the Lead and Copper Rule.

## **Sources of Additional Information about Lead Testing of Drinking Water in California Schools**

### **25. Whom can I contact for more information about lead testing of drinking water in California schools?**

If you have additional questions about any aspect of lead testing of drinking water in California schools, send an email to [DDW-PLU@waterboards.ca.gov](mailto:DDW-PLU@waterboards.ca.gov), or call (916) 449-5646.

## 26. Can I get information about lead testing of drinking water in California schools in Spanish?

En español:

- [Preguntas Frecuentes \(FAQs\) sobre las Pruebas para Detectar Plomo en el Agua Potable de Escuelas de CA](#)
- USEPA El plomo del agua potable en las escuelas y los centros de cuidado infantil: <https://espanol.epa.gov/espanol/el-plomo-del-agua-potable-en-las-escuelas-y-los-centros-de-cuidado-infantil>

## Links to Resources Cited in this Document

Title	Author	Link
<b>DDW Lead Sampling in Schools Website</b>	<b>DDW</b>	<a href="http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.shtml">http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.shtml</a>
3Ts for Reducing Lead in Drinking Water in Child Care Facilities	USEPA	<a href="http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=20017JVA.txt">http://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=20017JVA.txt</a>
3Ts for Reducing Lead in Drinking Water in Schools	USEPA	<a href="https://www.epa.gov/sites/production/files/2015-09/documents/toolkit_leadschools_guide_3ts_leadschools.pdf">https://www.epa.gov/sites/production/files/2015-09/documents/toolkit_leadschools_guide_3ts_leadschools.pdf</a>
Assisting Schools and Child Care Facilities in Addressing Lead in Drinking Water	AWWA	<a href="http://www.awwa.org/portals/0/files/legreg/documents/assisting-schools-lead-2005.pdf">http://www.awwa.org/portals/0/files/legreg/documents/assisting-schools-lead-2005.pdf</a>
California School Directory	CDE	<a href="http://www.cde.ca.gov/re/sd/index.asp">http://www.cde.ca.gov/re/sd/index.asp</a>
Centers for Disease Control Healthy Schools	CDC	<a href="http://www.cdc.gov/healthyschools/nutrition/schoolnutrition.htm">http://www.cdc.gov/healthyschools/nutrition/schoolnutrition.htm</a>
Certified Environmental Laboratories in California	ELAP	<a href="http://www.waterboards.ca.gov/drinking_water/certlic/labs/index.shtml">http://www.waterboards.ca.gov/drinking_water/certlic/labs/index.shtml</a>
Consumer Confidence Report Search Tool	USEPA	<a href="https://ofmpub.epa.gov/apex/safewater/f?p=136:102">https://ofmpub.epa.gov/apex/safewater/f?p=136:102</a>
DDW District Office Contact Information	DDW	<a href="http://www.waterboards.ca.gov/drinking_water/programs/documents/ddwem/DDWdistrictofficesmap.pdf">http://www.waterboards.ca.gov/drinking_water/programs/documents/ddwem/DDWdistrictofficesmap.pdf</a>
DDW Lead Sampling in Schools Sampling Protocol	DDW	<a href="http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.shtml">http://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/leadsamplinginschools.shtml</a>
DDW Supply Service Area Lookup Tool	DDW	<a href="http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/water_supplier.shtml">http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/water_supplier.shtml</a>
Home Water Testing	USEPA	<a href="https://www.epa.gov/sites/production/files/2015-11/documents/2005_09_14_faq_fs_homewatertesting.pdf">https://www.epa.gov/sites/production/files/2015-11/documents/2005_09_14_faq_fs_homewatertesting.pdf</a>
National Drinking Water Alliance	UC	<a href="http://www.drinkingwateralliance.org">http://www.drinkingwateralliance.org</a>
School Water Quality Improvement Funding Program	DFA	<a href="http://www.waterboards.ca.gov/water_issues/programs/grants_loans/">http://www.waterboards.ca.gov/water_issues/programs/grants_loans/</a>
Water Quality Funding Sources for Schools	USEPA	<a href="https://www.epa.gov/dwreginfo/water-quality-funding-sources-schools-resource-k-12-schools-and-child-care-facilities">https://www.epa.gov/dwreginfo/water-quality-funding-sources-schools-resource-k-12-schools-and-child-care-facilities</a>